Message

From: Ex. 4 CBI @TechLawInc.com]

Sent: 2/5/2019 8:30:41 PM

To: 'Huggins, William' [William.Huggins@wv.gov]
CC: Matlock, Dennis [Matlock.Dennis@epa.gov]
Subject: Draft Sample Description Tables and Figures

Attachments: Figure 3 Subsurface Soil Sample Location Map.pdf; Figure 4 EPA Well Location Map.pdf; Figure 5 Groundwater and

Sanitary Sewer Sample Location Map Rev1.pdf; Table X Groundwater and Waste Samples gn.xlsx; Table X Soil

Borings_Result_Summary_Draft.xlsx; Table X- Monitoring Wells.xlsx

Bill.

Dennis asked that I send you the attached figures and maps for Paden City. These are marked as Draft but have undergone QA review, but may have additional minor revisions in the final report.

A summary of info:

Results for soil samples have been validated. The soil samples collected on the east side of the building near the garage door all had significant levels of PCE, with one at a concentration of 1.9% PCE. So the former Bandbox dry cleaner is definitely a significant source area. We only have unvalidated data for the groundwater sampling which was done a couple weeks after the soil sampling, so we shouldn't disseminate the GW results. But results for the well in the road at the dry cleaner had 4,700 ppb PCE. The monitoring well we installed between the dry cleaner and the City Well #2 (EPA02) was non-detect for PCE. The well we installed on the other side of the school (EPA04) between the dry cleaner and the city well nos. 3, 4, and 5 only had a trace level of PCE at ~ 0.25 ppb. Additionally, surprisingly we detected a small amount of PCE, 4.9 ppb, in the background well. This was formerly a swampy area that was backfilled. It isn't too far from the dry cleaner, but is located hydrologically upgradient of the site. The Wissmach Glass well had 12 ppb PCE; Well #3 had 15 ppb PCE; Well #4 had 0.26 ppb (samples low-flow); influent had 21 ppb (with only well #5 running); effluent had 7.3 ppb. They had no power available to turn on Well #2 for sampling and the opening was too small to drop a bladder pump into the well.

Some things for future consideration:

- 1. We should install transducers in our monitoring wells and coordinate with the WVDEP person who has transducers in the city wells to get data to determine groundwater flow direction. This data is needed in order to determine the best locations for potentially new monitoring wells;
- 2. Next field job, we need to consider doing some Geoprobing at/near the other two former dry cleaner buildings, and possibly installing a monitoring well or two in that area to verify/determine if there is a source in that area that is impacting the city wells.
- 3. We may need to do more investigation to determine if Well #2 and possibly Wissmach Glass well were impacted due to transport of contaminants through the sanitary sewer lines.

Ex. 4 CBI

TechLaw, Inc. Wheeling, WV Tel: 740.867.0968 Mobile: 304.830.1442